

REMARKS

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. Per the outstanding Office Action, the pending claims were rejected and the rejection made final. Applicants are filing a Request for Continued Examination, herewith, so as to further advance the prosecution of the application.

Upon entry of this response, Claims 1 and 3-14 will be all the claims pending in the instant application. Of these claims, Claims 6-14 are newly added claims. Applicants respectfully submit no new matter has been added by the present amendment. Support for the amendment can be found generally throughout Applicants' disclosure. It should be noted this amendment is not in acquiescence of the Office's position on the allowability of the claims, but merely to expedite prosecution.

The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

CLAIM REJECTIONS

1. Takeda et al. (U.S. Patent No. 6,200,680) (hereinafter "Takeda")

Claims 1 and 3-5 stand rejected under 35 U.S.C. § 102(b) and/or 103(a) as being anticipated by, or obvious over, Takeda. Applicants respectfully disagree with the rejections for the following reasons and request the same be withdrawn.

As best understood, the Takeda reference relates to, *inter alia*, a process for producing zinc oxide particles comprising heating a mixture of a zinc source, a carboxylic containing compound, and an alcohol. Optionally, in order to obtain ZnO

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particles of increased uniformity, an additive may be added, such as an alcohol having an amino group. (Col. 20, Lines 21-39). This is said by the Office to meet the limitations of the presently claimed invention.

In stark contrast to Takeda stands the present invention in which the zinc oxide particles are re-dispersed. Thus to the extent Takeda is said by the Office to disclose a dispersion of ZnO, an alcohol, and an additive, the same fails to teach or suggest a re-dispersion of ZnO with an alcohol and an additive. The Office fails to give enough patentable weight to this fact, especially, with respect to Claim 1 which is not a product-by-process claim as suggested by the Examiner. Moreover, while Takeda appears to disclose a re-dispersion of its zinc oxide fine particles, it is clear from the Takeda reference that re-dispersion of ZnO particles are not re-dispersed in the same solution as originally dispersed (*e.g.*, in an alcohol and an amino alcohol additive containing solution). Thus Takeda fails to teach the presently claimed embodiment of the invention in which ZnO particles are redispersed in a water- and halogen- free dispersion comprising aminoalcohols and one or more C₂- to C₆- monoalcohols. The reference is not anticipatory and rejections based thereon should be now withdrawn.

Furthermore, there is no indication in Takeda that the presently claimed water- and halogen- free ZnO re-dispersion would have improved storage capabilities. As explained in the Applicants' specification, the invention is particularly notable in that the dispersions are storage stable and remain so for long periods of time without particle agglomeration, solids precipitation, separation, gelling, solidification, discoloration or curing, which is common and expected for ZnO dispersions in general. (Page 4, Lines 23-26)

As the Board of Patent Appeals & Interferences recently explained, "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." (*Ex Parte Carolyn Ramsey Catan*, Application No. 09/734,808 (July 3, 2007), *pg 10*, quoting *KSR v. Int'l Co. v. Teleflex*

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Inc., 127 S.Ct. 1727 at 1739.) It is respectfully submitted that the storage capabilities of the presently claimed embodiment of the invention were not predictable by one skilled in the art at the time of the invention. Thus the claims are not obvious and any such rejections should be immediately withdrawn.

2. Hagiwara et al. (U.S. Patent No. 5,672,427) (hereinafter "Hagiwara") and Hagiwara in view of Takeda

Claims 1, 3 and 5 stand rejected under 35 U.S.C. § 103(a) as being obvious over Hagiwara, while Claim 4 stands rejected under 35 U.S.C. § 103(a) as being obvious over Hagiwara in view of Takeda et al. Applicants respectfully disagree with the rejections for the following reasons and request the same be withdrawn.

As best understood, Hagiwara et al. disclose "A zinc oxide powder having high dispersibility, which contains one or more metal elements [I]mproved properties are obtained by improving the surface of the powder by immersing the powder in one or more organic liquids... and then drying the particles." (Abstract)

Hagiwara appears to teach as a means for improving the surface of the zinc oxide powder, the dispersion of the ZnO powder in one or more organic liquids consisting of alcohols, ketones, amines and esters. However, the dispersion is not a re-dispersion of the ZnO. Nor is there any teaching or suggestion that the organic liquid to be used is an aminoalcohol, especially, an aminoalcohol such as triethanolamine. Hagiwara also fails to provide any purpose or reason for the dispersion other than as a means of improving the ZnO surface, thus, the skilled artisan would not have had a reason to modify the Hagiwara invention to meet the limitations of the presently claimed invention nor would one expect to improve the qualities of the dispersion by such a modification.

For the aforementioned reasons the present invention is not obvious over

Hagiwara. In addition, Takeda fails to overcome the deficiencies of Hagiwara (and vice versa as set forth above). In light of these shortcomings the withdrawal of the present rejections is respectfully requested.

2. Womelsdorf et al. (WO 00/50503) as translated by Womelsdorf et al. (U.S. Patent No. 6,710,091) (hereinafter "Womelsdorf")

Claims 1 and 3-5 stand rejected under 35 U.S.C. § 103(a) over Womelsdorf.

Womelsdorf does not disclose a water- and halogen-free dispersion comprising zinc oxide particles, aminoalcohols and one or more C₂- to C₆- monoalcohols as set forth in Claim 1. The Applicants also submit that Womelsdorf does not disclose or suggest using an aminoalcohol with a water-free system including one or more C₂- to C₆- monoalcohols. Womelsdorf discloses "primary-particle-disperse sols can be created by adding organic solvents and/or water, optionally with the addition of surface-modifying compound." (Col. 3, lines 33-36) There is no suggestion that the surface-modifying compound is an aminoalcohol or that such is utilized in a water-free system. Moreover, there is no mention of the inclusion of one or more C₂- to C₆- monoalcohols.

Womelsdorf further states that in a preferred embodiment, "the gel is redispersed in mixtures, in particular diol and/or polyol/water mixtures, preferably using surface-modifying compounds," that are preferably, "nitrogen-containing compounds, particular preference being given to triethanolamine." (Col. 5, lines 16-21) This is the only disclosure in Womelsdorf of an aminoalcohol and this portion of the disclosure discloses using triethanolamine with a diol and/or polyol/water mixture. Nowhere is the incorporation of one or more C₂- to C₆- monoalcohols disclosed.

In light of the above, it is respectfully submitted the presently claimed invention would not have been obvious to one skilled in the art. The rejection should now be properly withdrawn.

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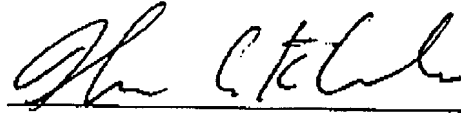
CONCLUSION:

In view of the foregoing, it is respectfully submitted that independent Claims 1 and 3 fully distinguish over the applied art and are thus are in condition for allowance. By virtue of dependence from what are believed to be allowable independent Claims 1 and 3, it is respectfully submitted that Claims 4-14 are also presently allowable. Notice to the effect is earnestly solicited. If there are any further issues in this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

The United States Patent & Trademark Office is hereby authorized to charge any fees which may be required by this paper and/or to credit any overpayments to Deposit Account No. 50-2527.

Respectfully submitted,

By



Nicanor A. Köhncke
Attorney for Applicants
Reg. No. 57,348

LANXESS CORPORATION
111 RIDC Park West Drive
Pittsburgh, Pennsylvania 15275-1112
(412) 809-2234
FACSIMILE PHONE NUMBER:
(412) 809-1054

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